

propellers, tailshafts, rudders, and other hull appurtenances;

(2) Examine all sea chests;

(3) Remove and inspect all sea valves in the presence of a marine inspector once every five years;

(4) Remove all passengers from the vessel when the sea valves are being examined, if required by the Officer in Charge, Marine Inspection (OCMI);

(5) Allow access to all internal areas of the hull for examination, except internal tanks that carry fuel, sewage, or potable water. Internal tanks that carry fuel must be examined in accordance with § 71.53-1 of this part. Internal sewage and potable water tanks may be examined visually or by non-destructive testing to the satisfaction of the attending marine inspector; and

(6) Meet the requirements in § 71.50-27 of this part.

(b) A marine inspector may examine any other areas deemed necessary by the OCMI.

(c) If the AHE reveals significant deterioration or damage to the vessel's hull plating or structural members, the OCMI must be immediately notified. The OCMI may require the vessel be drydocked or otherwise taken out of service to further assess the extent of damage or to effect permanent repairs if the assessment or repairs cannot be completed to the satisfaction of the OCMI while the vessel is waterborne.

[USCG-2000-6858, 67 FR 21078, Apr. 29, 2002, as amended by USCG-2000-6858, 69 FR 47382, Aug. 5, 2004]

§ 71.50-27 Alternative Hull Examination (AHE) program options: Divers or underwater remotely operated vehicle (ROV).

To conduct the underwater survey portion of the AHE, you may use divers or an underwater ROV.

(a) If you use divers to conduct the underwater survey, you must:

(1) Locate the vessel so the divers can work safely under the vessel's keel and around both sides. The water velocity must be safe for dive operations;

(2) Provide permanent hull markings, a temporary grid system of wires or cables spaced not more than 10 feet apart and tagged at one-foot intervals, or any other acoustic or electronic positioning system approved by the OCMI

to identify the diver's location with respect to the hull, within one foot of accuracy;

(3) Take ultrasonic thickness gaugings at a minimum of 5 points on each plate, evenly spaced;

(4) Take hull plating thickness gaugings along transverse belts at the bow, stern, and midships, as a minimum. Plating thickness gaugings must also be taken along a longitudinal belt at the wind and water strake. Individual gaugings along the transverse and longitudinal belts must be spaced no more than 3 feet apart;

(5) Ensure the third party examiner observes the entire underwater examination process;

(6) Record the entire underwater survey with audio and video recording equipment and ensure that communications between divers and the third party examiner are recorded; and

(7) Use appropriate equipment, such as a clear box, if underwater visibility is poor, to provide the camera with a clear view of the hull.

(b) You may use an underwater ROV to conduct the underwater survey. The underwater ROV operating team, survey process and equipment, quality assurance methods, and the content and format of the survey report must be accepted by the Officer in Charge, Marine Inspection (OCMI) prior to the survey. If you choose this option, you must—

(1) Locate the vessel to ensure that the underwater ROV can operate effectively under the vessel's keel and around all sides;

(2) Employ divers to examine any sections of the hull and appurtenances that the underwater ROV cannot access or is otherwise unable to evaluate; and

(3) If the OCMI determines that the data obtained by the ROV, including non-destructive testing results, readability of the results, and positioning standards, will not integrate into the data obtained by the divers, then a third party examiner must be present during the divers portion of the examination.

[USCG-2000-6858, 67 FR 21078, Apr. 29, 2002, as amended by USCG-2000-6858, 69 FR 47382, Aug. 5, 2004]